STATEMENT OF BASIS
SBIOMED
UPDES PERMIT NUMBER: UT0025682
MINOR INDUSTRIAL

FACILITY CONTACTS

Person Name:	Brook Snarr Chief Financial Officer
Facility Name:	sBioMed, LLC
Mailing Address:	1272 South 1380 West Orem, UT 84058
Telephone:	(801) 922-1111
Physical Address:	1775 South East Bay Blvd. Provo, UT 84606
Standard Industrial Classification (SIC) codes:	2842: Specialty Cleaning, Polishing, and Sanitation Preparation/Disinfectants, Household and Industrial plant

DESCRIPTION OF FACILITY

The property located at 1775 South East Bay Blvd, Provo, Utah will be leased to a tenant who will be manufacturing purified water through a reverse osmosis process. The residual water from this process will be disposed into Millrace Stream, directly across the street from the property. The raw ingredient is culinary water taken directly from the Provo City water system. This culinary water is run through a reverse osmosis water purification machine. For every ten gallons of water received from the culinary system, the machine removes chemicals, minerals, etc. that are present in the culinary water from one of the ten gallons of water, and adds these removed components to the remaining nine gallons of culinary water. The end product is one gallon of purified water which has been cleaned of all the minerals and chemicals originally present in the culinary water. The remaining nine gallons of culinary water, which now carry the additional chemicals and minerals from the one gallon of purified water, is disposed of into the Millrace Stream. No additional contaminants are added to the discharged water beyond what has been described above.

DISCHARGE

DESCRIPTION OF DISCHARGE

Outfall	Description of Discharge Point
001	Located at latitude 40°12'40" and longitude 111°39'00". Discharge is from a gravity flow pipe leading from the facility to the Mill Race Stream, which discharges to Utah Lake.

RECEIVING WATERS AND STREAM CLASSIFICATION

The Mill Race Stream is classified as 2B, 3B, and 4.

Class 2B -Protected for secondary contact recreation such as boating, wading, or similar uses.

Class 3B -Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.

Class 4 -Protected for agricultural uses including irrigation of crops and stock watering.

BASIS FOR EFFLUENT LIMITATIONS

In accordance with regulations promulgated in *40 Code of Federal Regulations (CFR) Part 122.44* and in *UAC R317-8-4.2*, effluent limitations are derived from technology-based effluent limitations guidelines, Utah Secondary Treatment Standards (*UAC R317-1-3.2*) or Utah Water Quality Standards (*UAC R317-2*). In cases where multiple limits have been developed, those that are more stringent apply. In cases where no limits have been developed, Best Professional Judgment (BPJ) may be used where applicable.

Effluent limitations are also derived using a wasteload analysis (WLA) (Addendum I). The WLA incorporates Secondary Treatment Standards, Water Quality Standards, and designated uses into a water quality model that projects the effects of discharge concentrations on receiving water quality. Effluent limitations are those that the model demonstrates are sufficient to meet Utah Water Quality Standards in the receiving waters. The effluent limitations are described below.

Parameter	Effluent Limitations			
	30 – Day Average	Maximum 7 - Day Average	Daily Minimum	Daily Maximum
Total Residual Chlorine, mg/L	NA	NA	NA	0.028
Total Dissolved Solids, mg/L	NA	NA	NA	1200
pH, Standard Units	NA	NA	6.5	9.0
Dissolved Oxygen, mg/L	NA	NA	4.0	NA

NA – Not Applicable.

The effluent limitations for pH are based on Utah Secondary Treatment Standards. Limitations on total residual chlorine, dissolved oxygen, and total dissolved solids are based on the WLA.

SELF-MONITORING AND REPORTING REQUIREMENTS

The permit will require self-monitoring reports to be submitted monthly on Discharge Monitoring Report (DMR) forms, which will be due 28 days after the end of the monitoring period.

Table 2. Self-Monitoring and Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Total Flow *a/ b/*	Continuous	Recorder	MGD
Total Residual Chlorine	Daily	Grab	mg/L
Total Dissolved Solids	2 x Month	Grab	mg/L
pH	2 x Month	Grab	SU
Dissolved Oxygen	2 x Month	Grab	mg/L

a/ Flow measurements of influent/effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

b/ If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

STORM WATER REQUIREMENTS

The facility's SIC code is 2842 for specialty cleaning, polishing, and sanitation preparation/ household and industrial plant disinfectants: Storm water requirements are included in the permit. sBIOMED is required to develop a storm water pollution prevention plan in compliance with the permit conditions.

PRETREATMENT REQUIREMENTS

Although the permittee does not have to develop a State-approved pretreatment program, any wastewater discharges to the sanitary sewer are subject to Federal, State and local regulations.

Pursuant to *Section 307* of the *Clean Water Act*, the permittee shall comply with all applicable Federal General Pretreatment Regulations promulgated, found in *40 CFR 403* and the State Pretreatment Requirements found in *UAC R317-8-8*.

BIOMONITORING REQUIREMENTS

As part of a nationwide effort to control toxic discharges, biomonitoring requirements are being included in permits for facilities where effluent toxicity is an existing or potential concern. In Utah, this is done in accordance with the *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control (Biomonitoring (2/1991))*. Authority to require effluent biomonitoring is provided in *Utah Pollutant Discharge Elimination System UAC R317-8,* and, *Water Quality Standards UAC R317-2*.

SBioMed is a minor facility and its discharges are not likely to be toxic since the facility will be essentially discharging culinary water. Therefore, no whole effluent toxicity testing is required. However, the permit will contain a toxicity limitation-reopener provision if toxicity is believed to be present during the life of the permit.

PERMIT DURATION

It is recommended that this permit be effective for a duration of five (5) years.

Drafted by
Matthew Garn
July 10, 2006
Utah Division of Water Quality